Experiment Map - English

1 About phase 1 - Tasks

Table 1: List of diagrams received by participants according to the Latin square scheme.

	Phase 1		
Group	Task A1	Task A2	Task A3
X_1	Diagrama(A)	Diagrama(B)	Diagrama(C)
X_2	Diagrama(F)	Diagrama(D)	Diagrama(E)
X_3	Diagrama(H)	Diagrama(I)	Diagrama(G)

Table 2: Details about each question

	Phase 1
Task	Question
A1	WRITE the Python code corresponding to the DIAGRAM below.
A2	WRITE the Python code corresponding to the DIAGRAM below.
A3	WRITE the Python code corresponding to the DIAGRAM below.

2 About phase 2 - Tasks

- **Task B1** - Observe the following Python-based diagram. Write on space below what the result will be (the field you should analyze is marked in red) based on the following inputs: INPUTS: X = "ab", Y = "Aa"
- **Task B2** - Observe the following Python code. Write what the result of this code on line 33 based on the inputs provided below: INPUTS: idA = [1, 0, 1] idB = [2, 0, 3]

Table 3: List of diagrams received by participants according to the Latin square scheme.

	Phase 2	
Group	Task B1	Task B2
Y_1	Script(BY)	Diagram(AY)
Y_2	Diagram(AY)	Script(BY)

3 Image List (Phase 1)

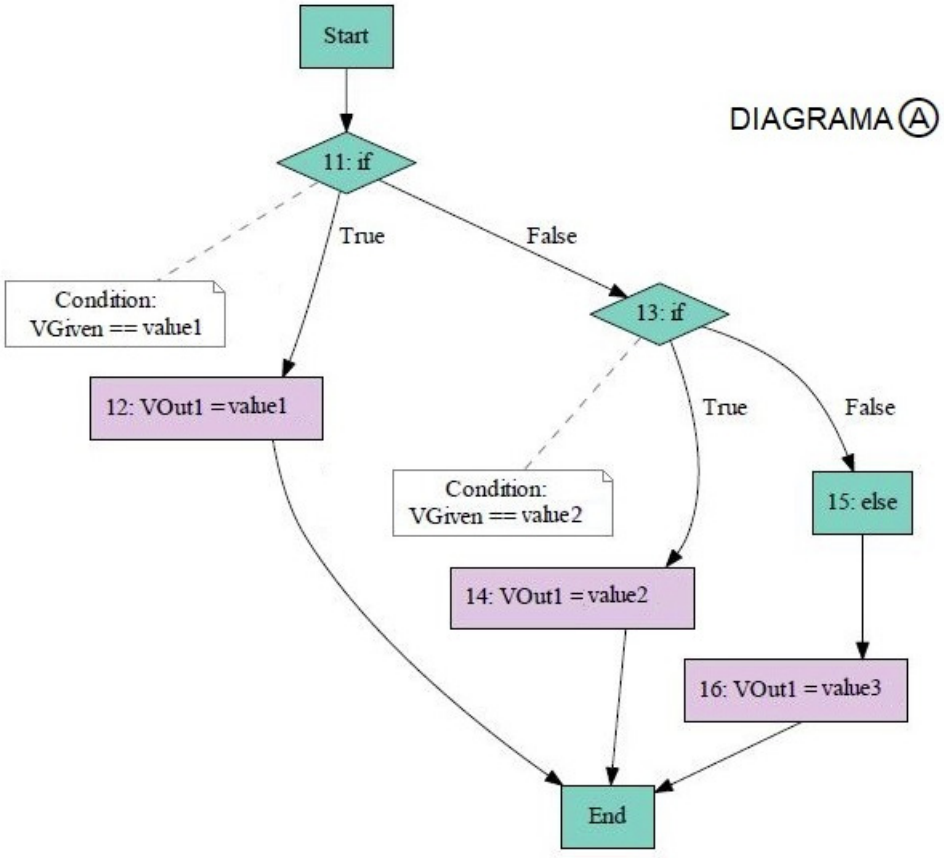


DIAGRAMA Ⓑ

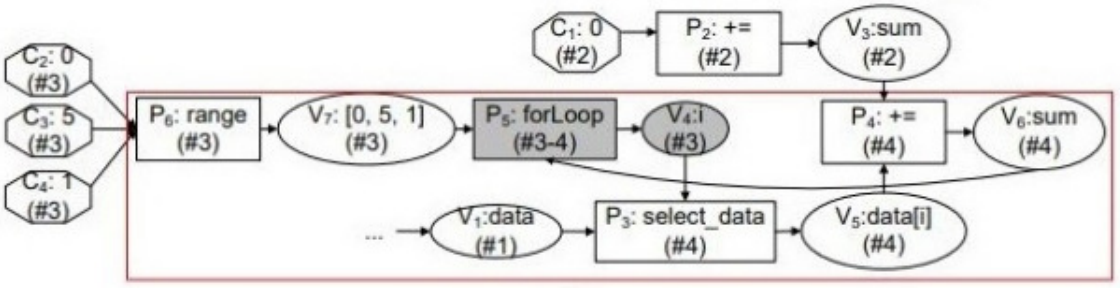

C1: 0
(#2)
P2: +=
(#2)
V3:sum
(#2)
C2: 0
(#3)
C3: 5
(#3)
C4: 1
(#3)
P6: range
(#3)
V7: [0, 5, 1]
(#3)
P5: forLoop
(#3-4)
V4:i
(#3)
P4: +=
(#4)
V6:sum
(#4)
...
V1:data
(#1)
P3: select_data
(#4)
V5:data[i]
(#4)

DIAGRAMA ©

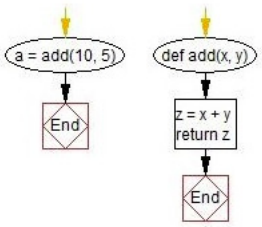


DIAGRAMA Ⓓ

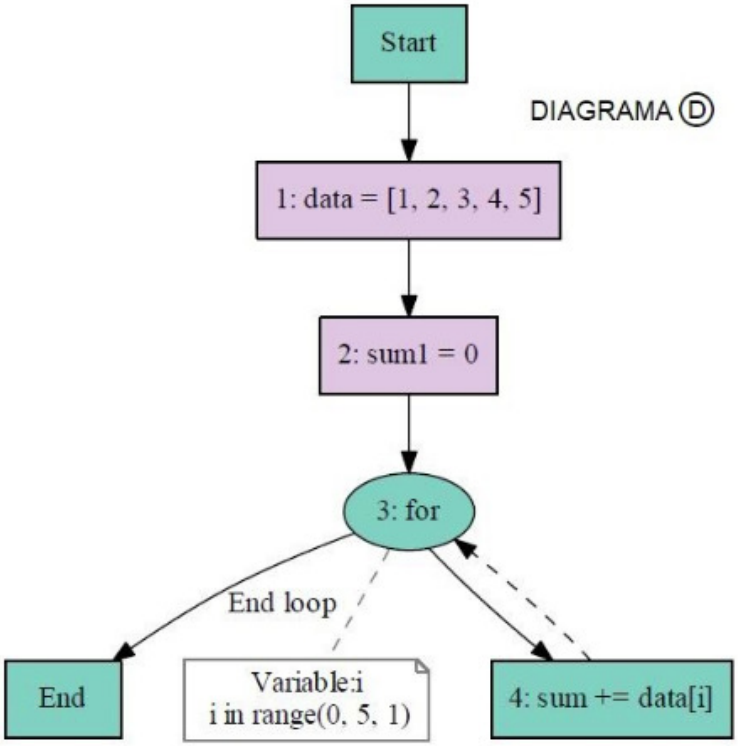


DIAGRAMA Ⓔ

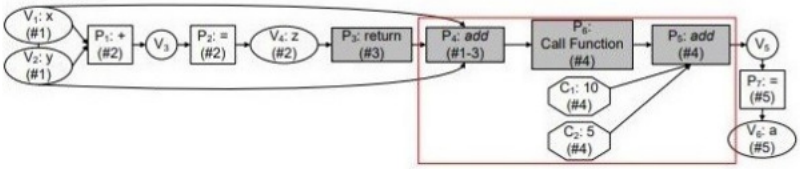
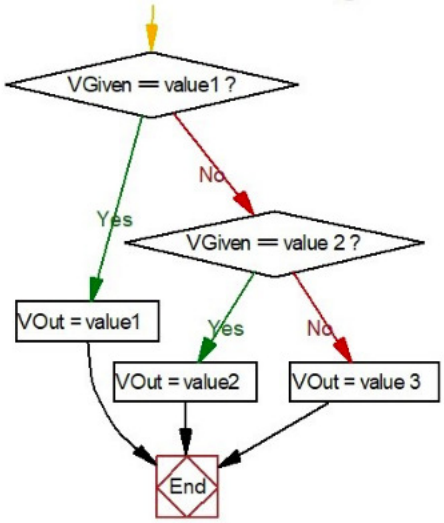


DIAGRAMA Ⓕ



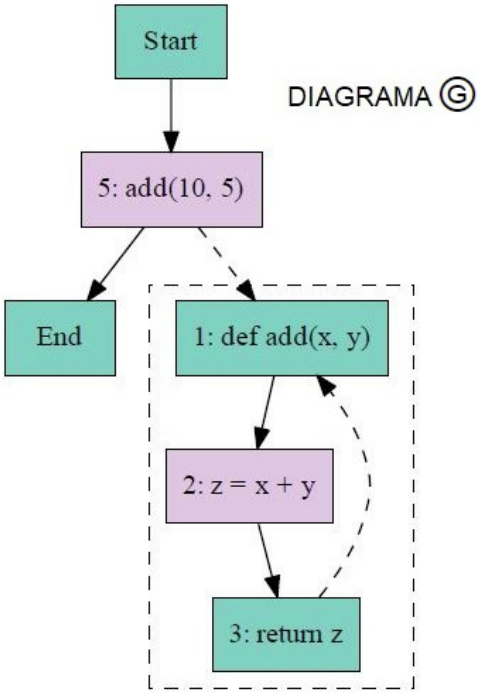
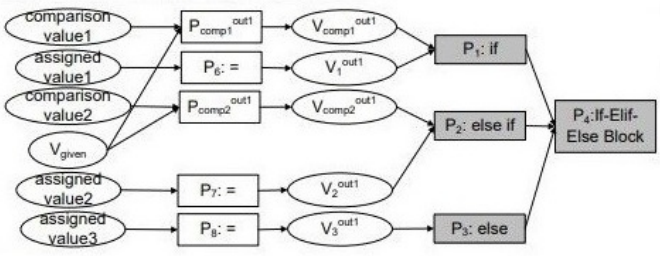
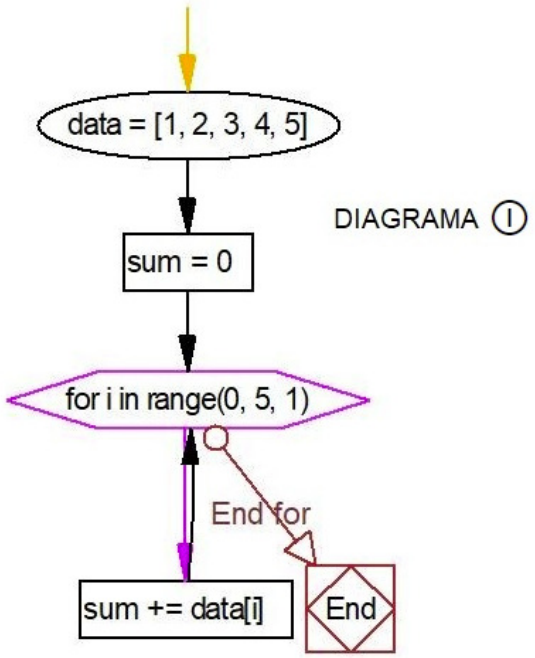


DIAGRAMA Ⓖ

DIAGRAMA Ⓗ





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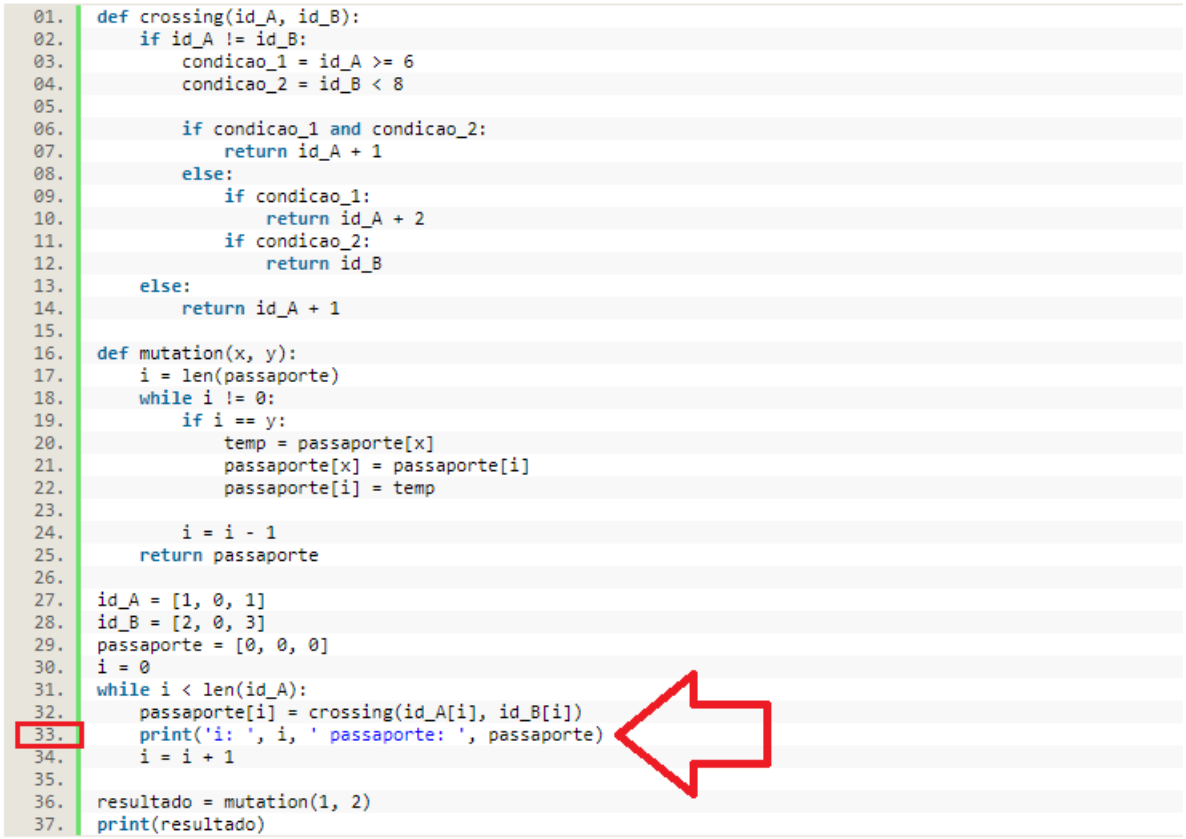
4 Image List (Phase 2)



```
01. def crossing(id_A, id_B):
02.     if id_A != id_B:
03.         condicao_1 = id_A >= 6
04.         condicao_2 = id_B < 8
05.
06.         if condicao_1 and condicao_2:
07.             return id_A + 1
08.         else:
09.             if condicao_1:
10.                 return id_A + 2
11.             if condicao_2:
12.                 return id_B
13.     else:
14.         return id_A + 1
15.
16. def mutation(x, y):
17.     i = len(passaporte)
18.     while i != 0:
19.         if i == y:
20.             temp = passaporte[x]
21.             passaporte[x] = passaporte[i]
22.             passaporte[i] = temp
23.
24.         i = i - 1
25.     return passaporte
26.
27. id_A = [1, 0, 1]
28. id_B = [2, 0, 3]
29. passaporte = [0, 0, 0]
30. i = 0
31. while i < len(id_A):
32.     passaporte[i] = crossing(id_A[i], id_B[i])
33.     print('i: ', i, ' passaporte: ', passaporte)
34.     i = i + 1
35.
36. resultado = mutation(1, 2)
37. print(resultado)
```

Figure 1: Example script used in the experiment

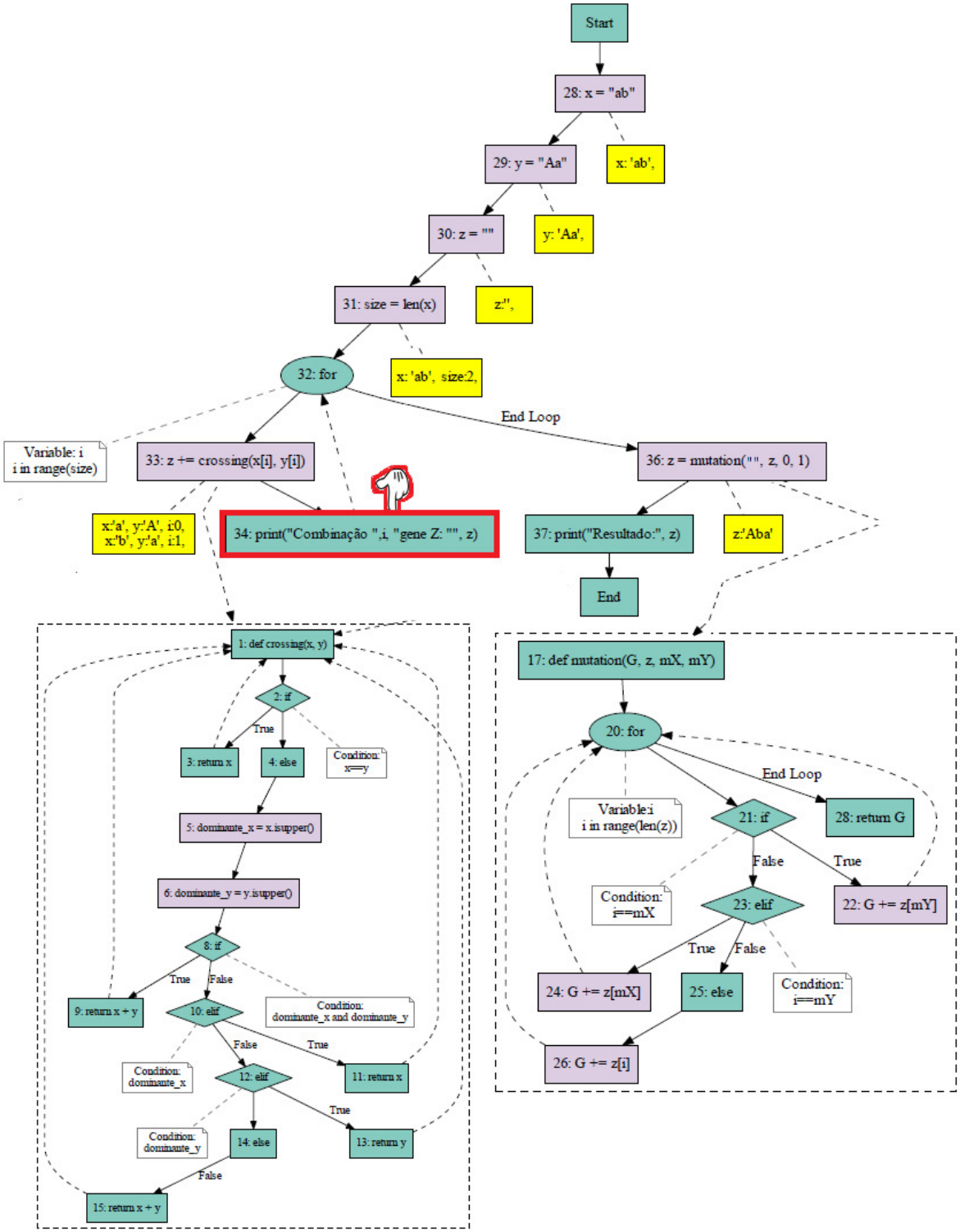


Figure 2: Example diagram used in the experiment

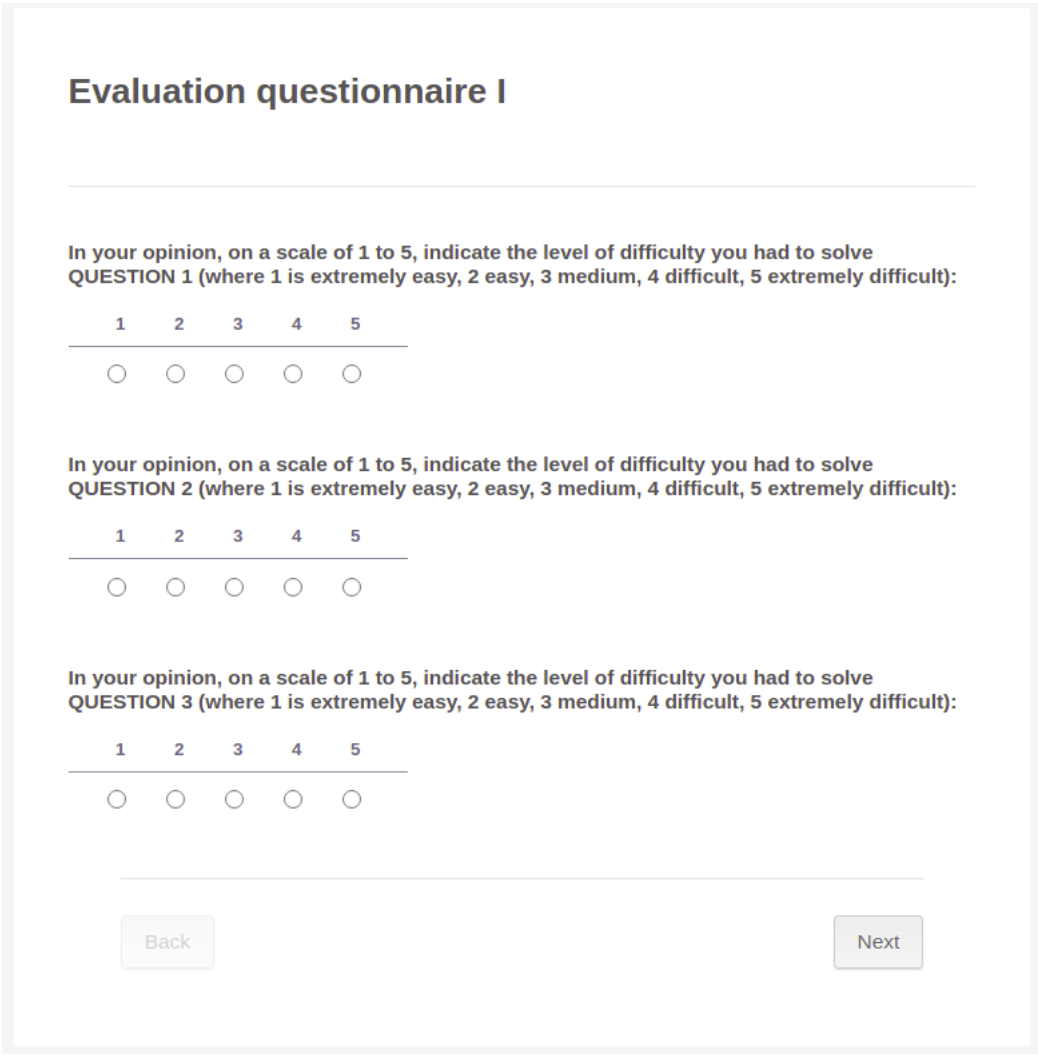


Figure 3: Evaluation questionnaire I

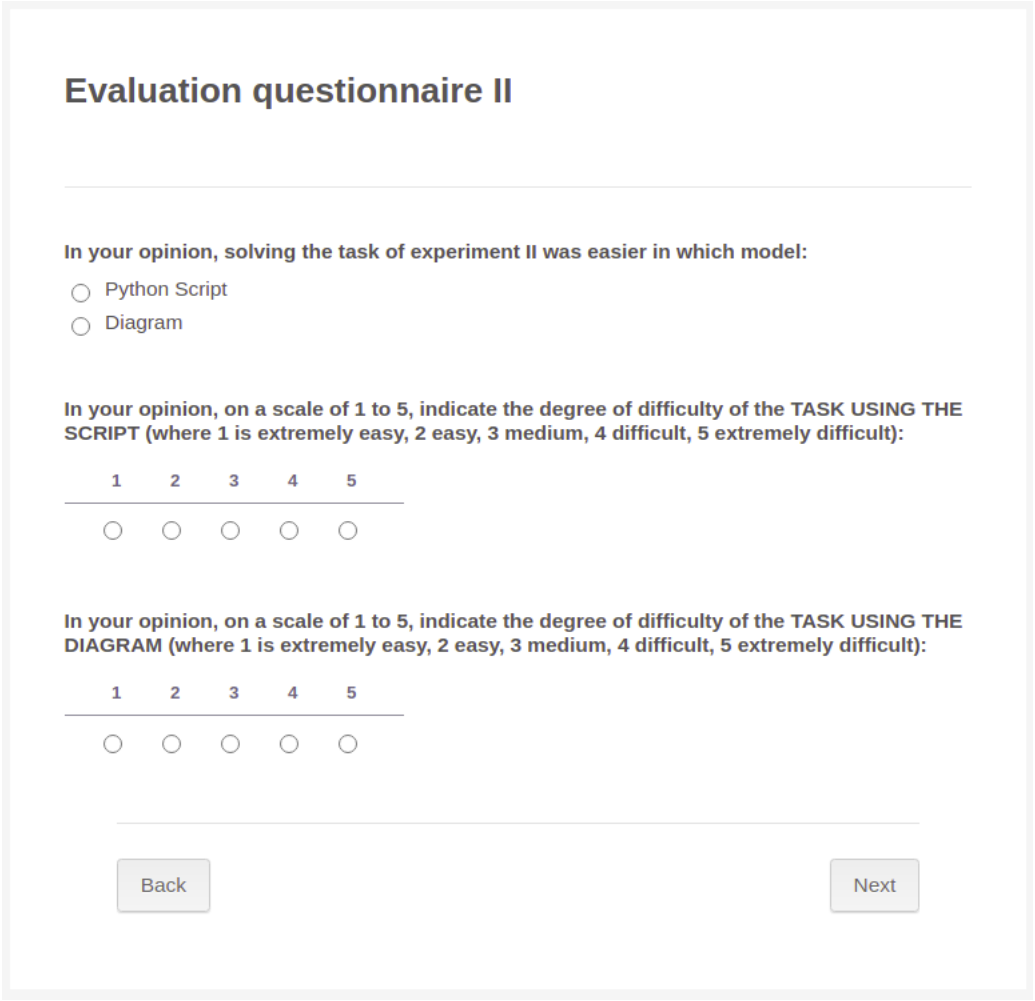


Figure 4: Evaluation questionnaire II